GROUP 15

INTAKE AND EXHAUST

CONTENTS

SERVICE SPECIFICATION 15-2

SPECIAL TOOLS 15-2

INTAKE AND EXHAUST DIAGNOSIS 15-2
- INTRODUCTION 15-2
- TROUBLESHOOTING STRATEGY 15-2
- SYMPTOM CHART 15-3
- SYMPTOM PROCEDURES 15-3

AIR CLEANER 15-4
- REMOVAL AND INSTALLATION <2.4L ENGINE> 15-4
- REMOVAL AND INSTALLATION <3.0L ENGINE> 15-5

INTAKE MANIFOLD PLENUM <3.0L ENGINE> 15-6
- REMOVAL AND INSTALLATION 15-6

INTAKE MANIFOLD 15-8
- REMOVAL AND INSTALLATION <2.4L ENGINE> 15-8
- REMOVAL AND INSTALLATION <3.0L ENGINE> 15-11
- INSPECTION 15-13

EXHAUST MANIFOLD 15-14
- REMOVAL AND INSTALLATION <2.4L ENGINE> 15-14
- REMOVAL AND INSTALLATION <3.0L ENGINE> 15-18
- INSPECTION 15-21

EXHAUST PIPE AND MAIN MUFFLER 15-22
- REMOVAL AND INSTALLATION <2.4L ENGINE> 15-22
- REMOVAL AND INSTALLATION <3.0L ENGINE> 15-26

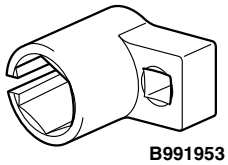
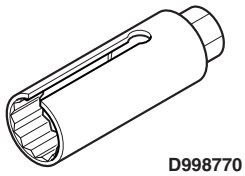
SERVICE SPECIFICATION

M1151000301818

Item		Standard value	Limit
Intake manifold distortion of the installation surface mm (in) <3.0L Engine>		0.15 (0.006) or less	0.20 (0.008)
Exhaust manifold distortion of the installation surface mm (in)	4B1	–	0.7 (0.028)
	6B3	0.7 (0.028) or less	0.5 (0.020)

SPECIAL TOOLS

M1151000600957

Tool	Tool number and name	Supersession	Application
 B991953	MB991953 Oxygen sensor wrench	MB991953-01	Removal and installation of heated oxygen sensor
 D998770	MD998770 Oxygen sensor wrench	MD998770-01 or General service tool	

INTAKE AND EXHAUST DIAGNOSIS

INTRODUCTION

M1151006900387

Intake leaks usually create driveability issues that are not obviously related to the intake system. Exhaust leaks or abnormal noise is caused by cracks, gaskets and fittings, or by exhaust pipe or muffler damage due to impacts during travel. The exhaust leaks from these sections and causes the exhaust noise to increase. There may be cases when the system contacts the body and vibration noise is generated.

TROUBLESHOOTING STRATEGY

M1151007000376

Use these steps to plan your diagnostic strategy. If you follow them carefully, you will be sure that you have exhausted most of the possible ways to find an intake or exhaust system fault.

1. Gather information from the customer.
2. Verify that the condition described by the customer exists.
3. Find the malfunction by following the Symptom Chart.
4. Verify malfunction is eliminated.

SYMPTOM CHART

M1151007100373

Symptom	Inspection procedure	Reference page
Exhaust leakage	1	P.15-3
Abnormal noise	2	P.15-3

SYMPTOM PROCEDURES

Inspection Procedure 1: Exhaust Leakage

DIAGNOSIS

STEP 1. Start the engine. Have an assistant stay in the driver's seat. Raise the vehicle on a hoist. Have the assistant rev the engine while searching for exhaust leaks.

Q: Is the exhaust leaking?
YES : Go to Step 2.
NO : The procedure is complete.

STEP 2. Check the gasket for cracks, damage.

Q: Is the gasket damaged?
YES : Replace the gasket, then go to Step 1.
NO : Go to Step 3.

STEP 3. Check for loosening in each coupling section.

Q: Is there any loosening in any section?
YES : Tighten, then go to Step 1.
NO : There is no action to be taken.

Inspection Procedure 2: Abnormal Noise

DIAGNOSIS

STEP 1. Start the engine. Have an assistant stay in the drivers seat. Raise the vehicle on a hoist. Have the assistant rev the engine while searching for exhaust leaks.

Q: Is any abnormal noise generated?
YES : Go to Step 2.
NO : The procedure is complete.

STEP 2. Check for missing parts in the muffler. Tap the muffler lightly to check for loose baffles, etc.

Q: Are there any missing parts in the muffler?
YES : Replace, then go to Step 1.
NO : Go to Step 3.

STEP 3. Check the hanger for cracks.

Q: Is the hanger cracked?
YES : Replace, then go to Step 1.
NO : Go to Step 4.

STEP 4. Check for interference of the pipes and muffler with the body.

Q: Are the pipes and muffler interfering with the body?
YES : Repair, then go to Step 1.
NO : Go to Step 5.

STEP 5. Check the heat protectors.

Q: Are any heat protectors loose or damaged?
YES : Tighten or replace, then go to Step 1.
NO : Go to Step 6.

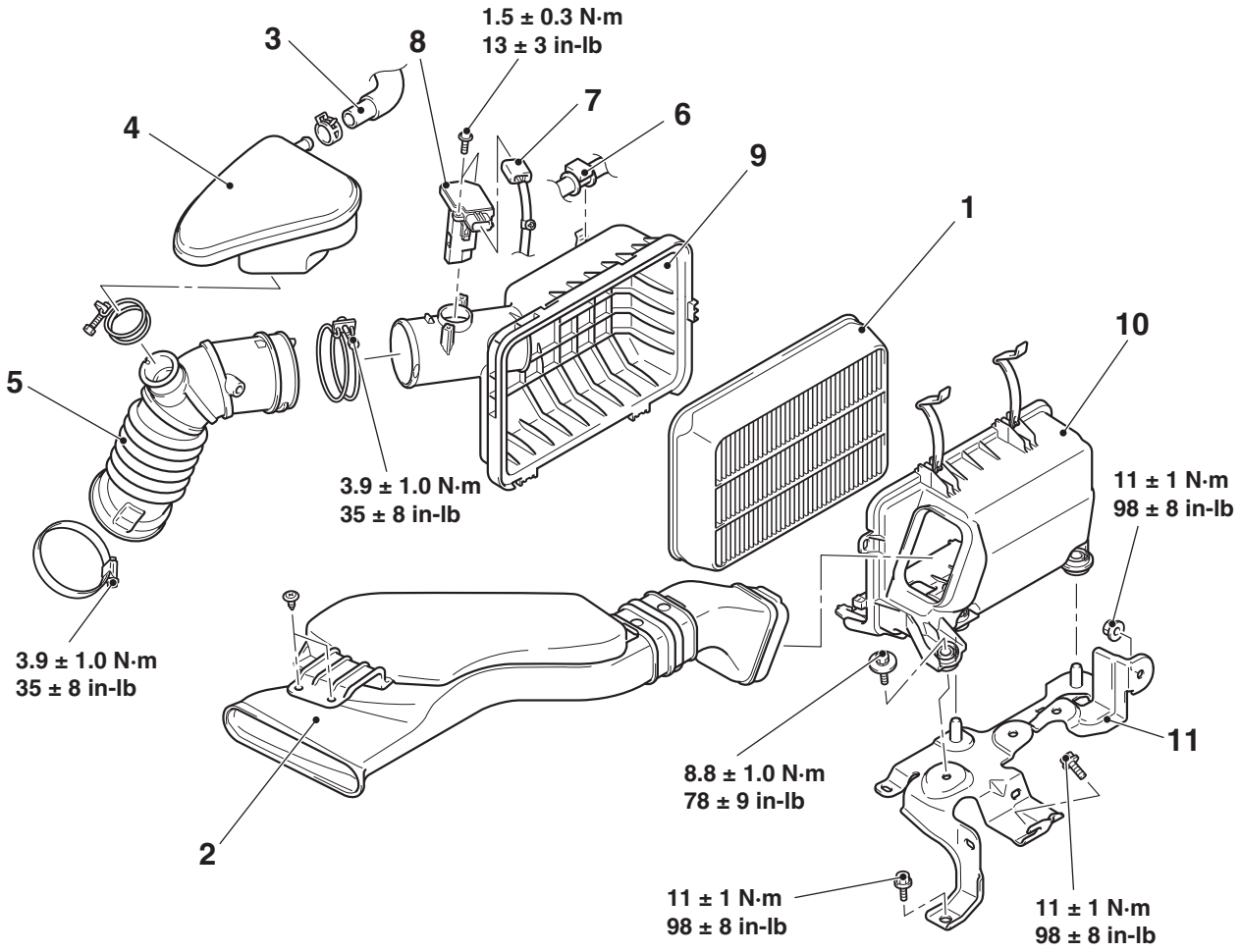
STEP 6. Check the pipes and muffler for damage.

Q: Are the pipes and muffler damaged?
YES : Replace, then go to Step 1.
NO : There is no action to be taken.

AIR CLEANER

REMOVAL AND INSTALLATION <2.4L ENGINE>

M1151002102448



AC709727AB

Removal steps

1. Air cleaner element
2. Air cleaner intake duct
3. Breather hose connection
4. Air cleaner resonator
5. Air cleaner intake hose
6. Vacuum hose connection
7. Mass airflow sensor connector connection

Removal steps (Continued)

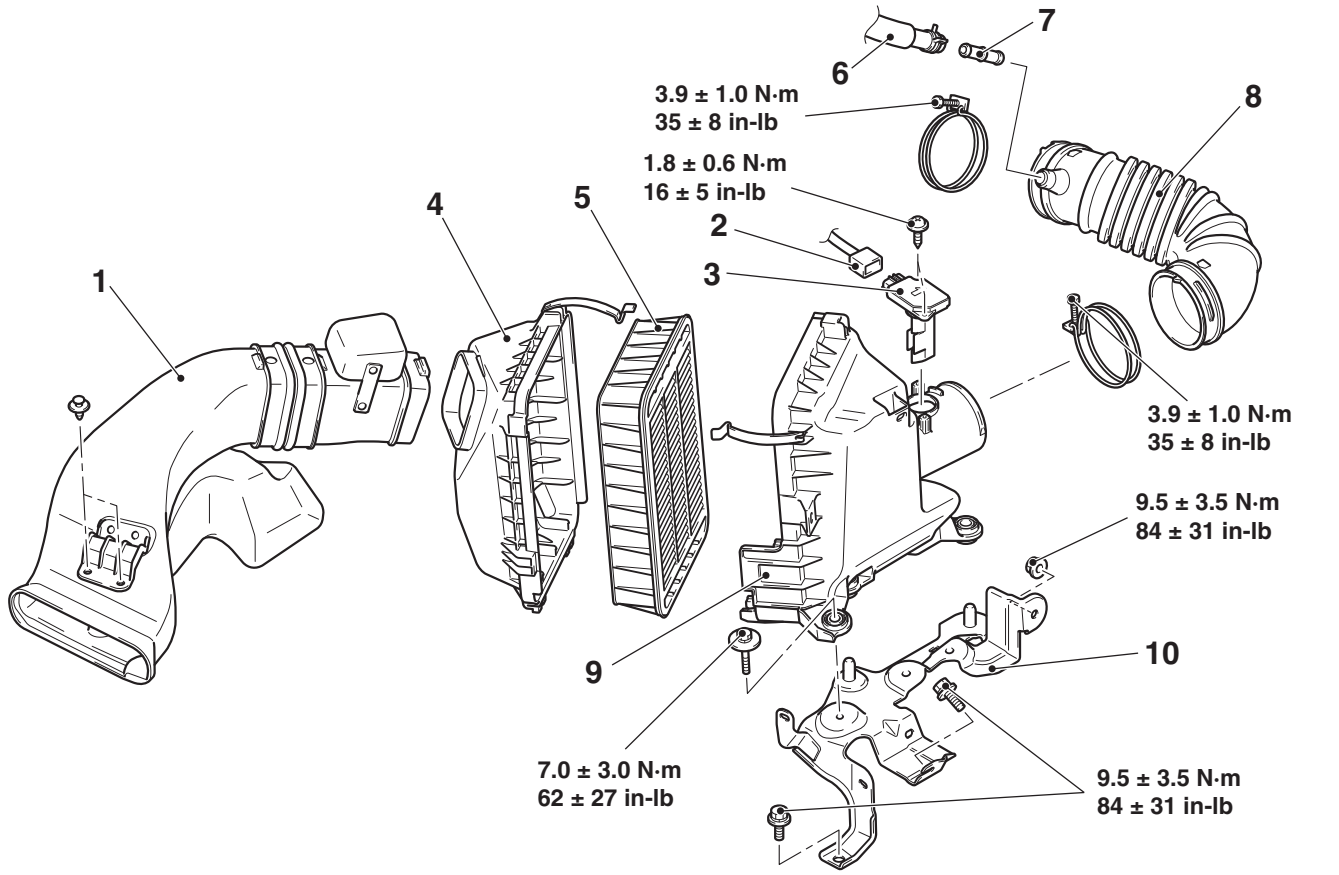
8. Mass airflow sensor
9. Air cleaner cover
10. Air cleaner body
- Engine control module [Refer to GROUP 13A, Engine Control Module (ECM) P.13A-982]

11. Air cleaner bracket

TSB Revision

REMOVAL AND INSTALLATION <3.0L ENGINE>

M1151002102459



AC703706AB

Removal steps
1. Air cleaner intake duct
2. Mass airflow sensor connector connection
3. Mass airflow sensor
4. Air cleaner body
5. Air cleaner element
6. Breather hose connection

Removal steps (Continued)

>>A<<
7. Nipple
8. Air cleaner to throttle body duct
- Engine control module [Refer to GROUP 13B, Engine Control Module (ECM) P.13B-894]
9. Air cleaner cover
10. Air cleaner bracket

INSTALLATION SERVICE POINT

>>A<< NIPPLE INSTALLATION

⚠ CAUTION
Securely install the nipple to the air cleaner to throttle body duct.

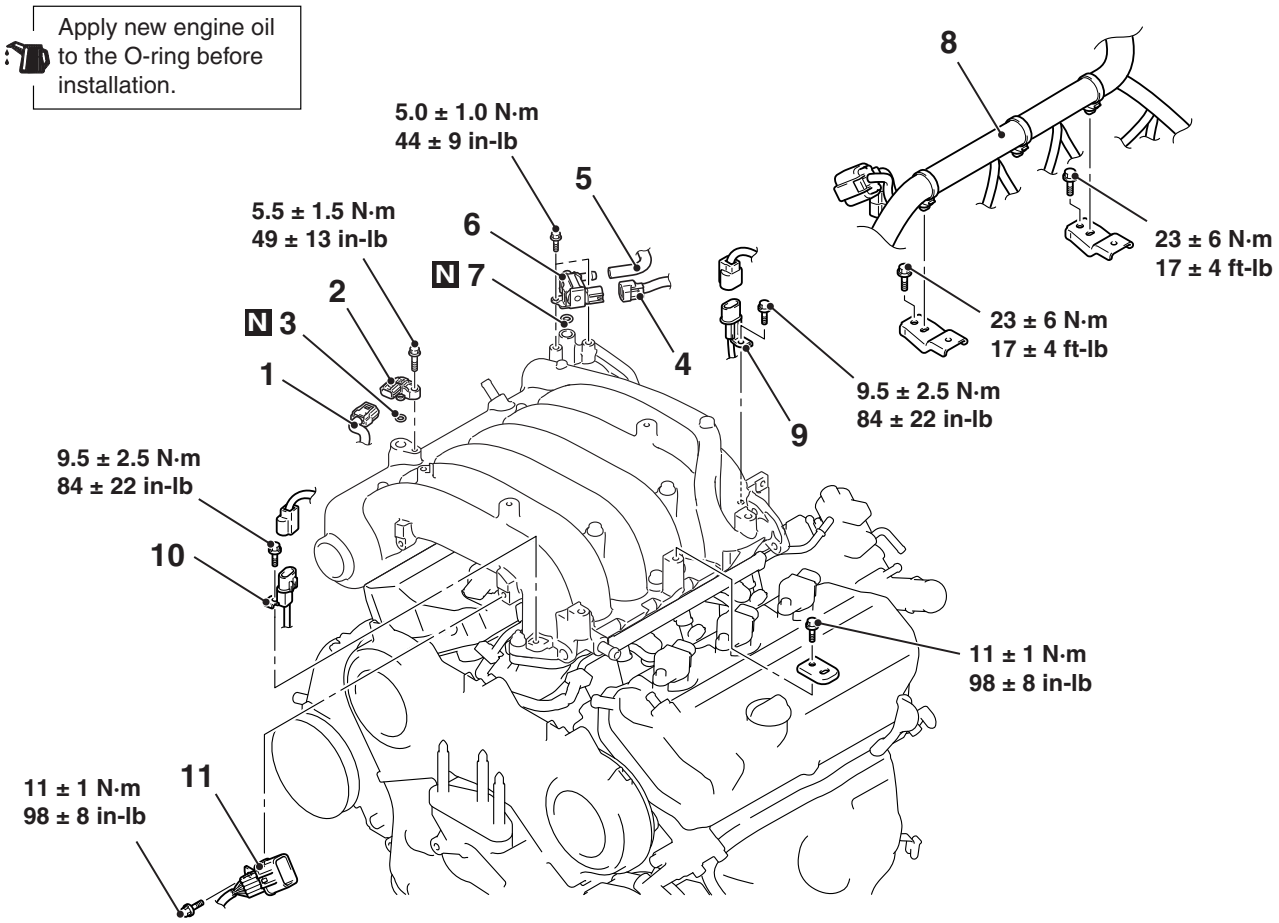
TSB Revision

INTAKE MANIFOLD PLENUM <3.0L ENGINE>

REMOVAL AND INSTALLATION

M1151002700552

Pre-removal Operation	Post-installation Operation
• Engine Coolant Draining (Refer to GROUP 14, On-vehicle Service –Engine Coolant Change P.14-24). • Engine Cover Removal (Refer to GROUP 16, Ignition System –Ignition Coil P.16-47). • Strut Tower Bar Removal (Refer to GROUP 42A, Strut Tower Bar P.42A-11). • Air Cleaner Assembly Removal (Refer to P.15-5). • Throttle Body Assembly Removal (Refer to GROUP 13B, Throttle Body P.13B-892).	• Throttle Body Assembly Installation (Refer to GROUP 13B, Throttle Body P.13B-892). • Air Cleaner Assembly Installation (Refer to P.15-5). • Strut Tower Bar Installation (Refer to GROUP 42A, Strut Tower Bar P.42A-11). • Engine Cover Installation (Refer to GROUP 16, Ignition System –Ignition Coil P.16-47). • Engine Coolant Refilling (Refer to GROUP 14, On-vehicle Service –Engine Coolant Change P.14-24).



AC809104AB

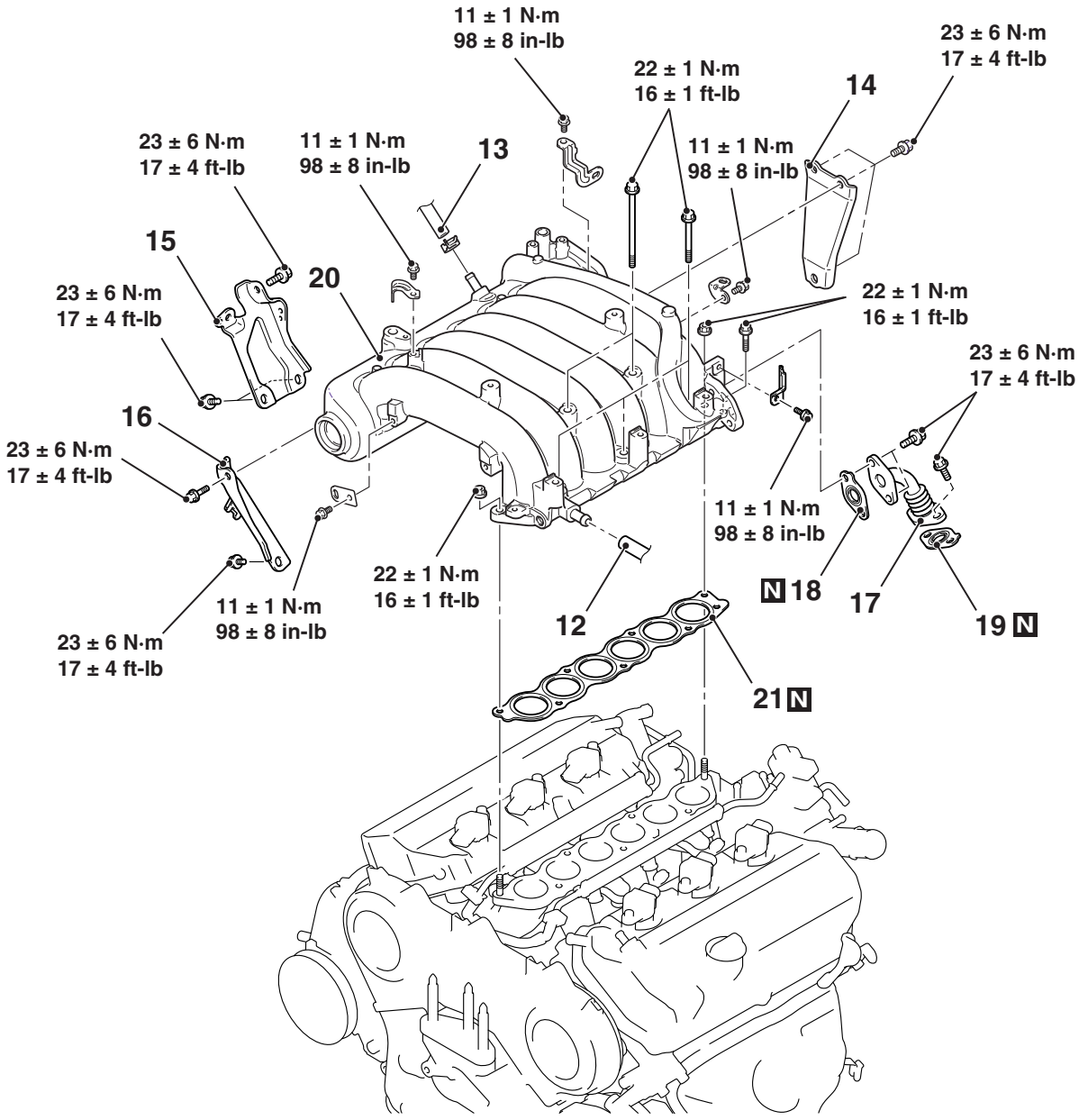
Removal steps

1. Manifold absolute pressure sensor connector
>>A<< 2. Manifold absolute pressure sensor
3. O-ring
4. Purge control solenoid valve connector
5. Purge hose connection
6. Purge control solenoid valve
7. O-ring

Removal steps (Continued)

8. Control wiring harness connection
9. Right bank detonation sensor connector
10. Left bank detonation sensor connector
11. Control wiring harness and injector wiring harness combination connector

TSB Revision



AC809105AB

Removal steps

12. Blow-by hose connection
13. Brake booster vacuum hose connection
14. Throttle body stay
15. Intake manifold plenum stay (rear)
16. Intake manifold plenum stay (front)

Removal steps (Continued)

17. EGR pipe
18. EGR pipe gasket
19. EGR pipe gasket
20. Intake manifold plenum
21. Intake manifold plenum gasket

TSB Revision

INSTALLATION SERVICE POINT

>>A<< MANIFOLD ABSOLUTE PRESSURE SENSOR INSTALLATION

⚠ CAUTION

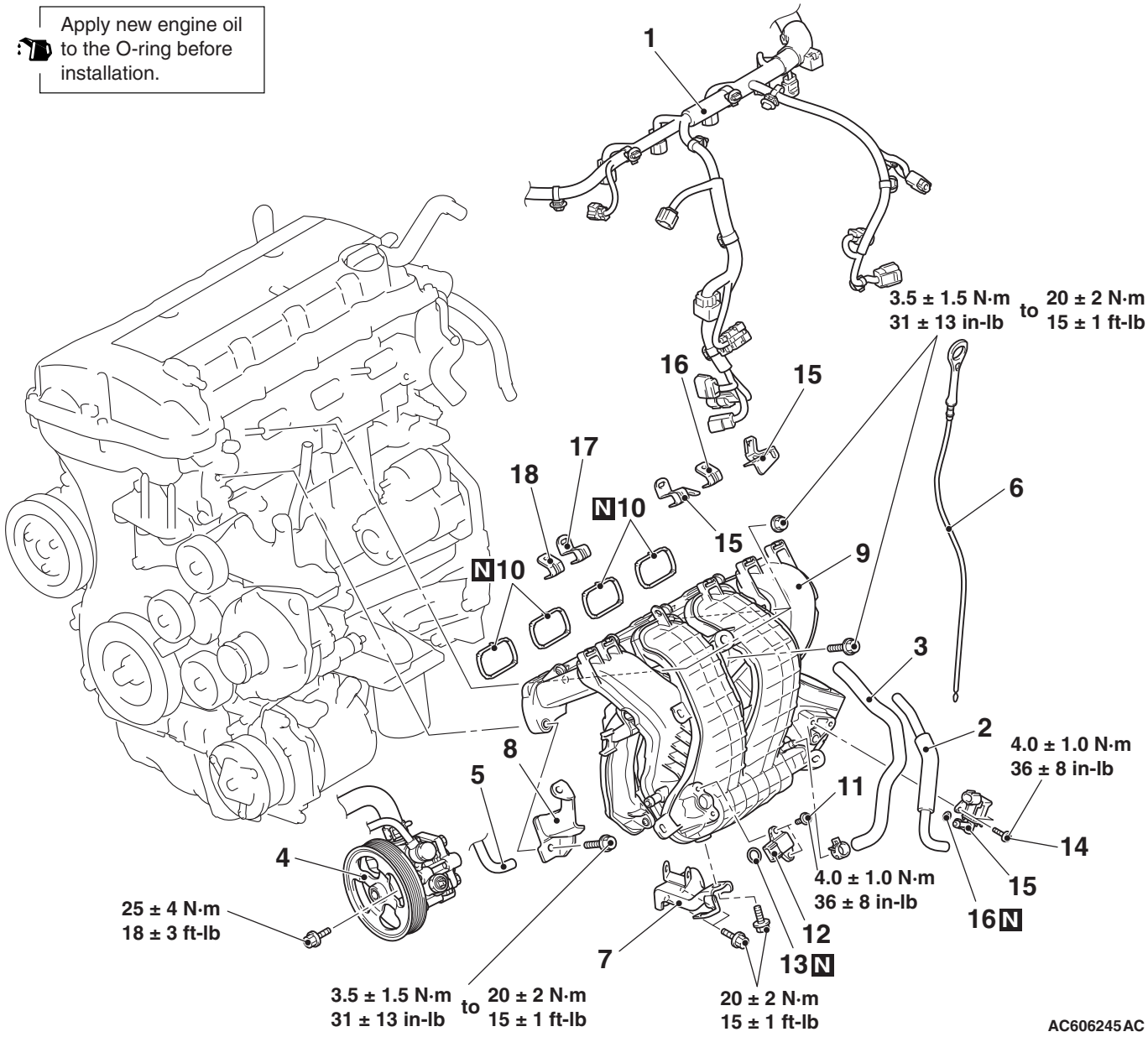
- **Install the manifold absolute pressure sensor, taking care not to give a shock to it.**
- **Do not use a manifold absolute pressure sensor that has fallen down.**

INTAKE MANIFOLD

REMOVAL AND INSTALLATION <2.4L ENGINE>

M1151003003135

Pre-removal operation	Post-installation operation
• Engine Coolant Draining (Refer to GROUP 14, On-vehicle Service –Engine Coolant Change P.14-24). • Engine Upper Cover Removal (Refer to GROUP 11A, Camshaft P.11A-24). • Generator and Others Belt Removal (Refer to GROUP 11A, Crankshaft Pulley P.11A-19). • Air Cleaner Intake Hose and Air Cleaner Assembly Removal (Refer to P.15-4). • Throttle Body Assembly Removal (Refer to GROUP 13A, Throttle Body Assembly P.13A-980). • Fuel Injector Removal (Refer to GROUP 13A, Injector P.13A-975). • EGR Valve and EGR Valve Stay Removal (Refer to GROUP 17, EGR Valve P.17-85).	• EGR Valve and EGR Valve Stay Installation (Refer to GROUP 17, EGR Valve P.17-85). • Fuel Injector Installation (Refer to GROUP 13A, Injector P.13A-975). • Throttle Body Assembly Installation (Refer to GROUP 13A, Throttle Body Assembly P.13A-980). • Air Cleaner Intake Hose and Air Cleaner Assembly Installation (Refer to P.15-4). • Generator and Others Belt Installation (Refer to GROUP 11A, Crankshaft Pulley P.11A-19). • Engine Upper Cover Installation (Refer to GROUP 11A, Camshaft P.11A-24). • Engine Coolant Refilling (Refer to GROUP 14, On-vehicle Service –Engine Coolant Change P.14-24).



Removal steps

1. Control wiring harness connection
2. Emission vacuum hose
3. Brake booster vacuum hose

<<**A**>> 4. Power steering oil pump assembly

5. Rocker cover PCV hose
6. Engine oil level gauge
7. Intake manifold stay

>>**C**<< 8. Injector protector front

>>**C**<< 9. Intake manifold assembly

Removal steps (Continued)

10. Intake manifold gasket

>>**A**<< 11. Screw

>>**B**<< 12. Manifold absolute pressure sensor

13. O-ring

>>**A**<< 14. Screw

15. Purge control solenoid valve
16. O-ring
17. Intake manifold harness bracket
18. Engine cover bracket

TSB Revision

REMOVAL SERVICE POINT

<<A>> POWER STEERING OIL PUMP ASSEMBLY REMOVAL

1. With the hose installed, remove the power steering oil pump assembly from the bracket.
2. Tie the removed power steering oil pump assembly with a string at a position where it will not interfere with the removal and installation of the intake manifold.

INSTALLATION SERVICE POINTS

>>A<< SCREW INSTALLATION

⚠ CAUTION

Do not over-tighten. As the self-forming-type screw is used, the excessive torque can damage the intake manifold threads.

>>B<< MANIFOLD ABSOLUTE PRESSURE SENSOR INSTALLATION

⚠ CAUTION

- **Install the manifold absolute pressure sensor, taking care not to give a shock to it.**
- **Do not use a manifold absolute pressure sensor that has fallen down.**

>>C<< INTAKE MANIFOLD ASSEMBLY/INJECTOR PROTECTOR FRONT INSTALLATION

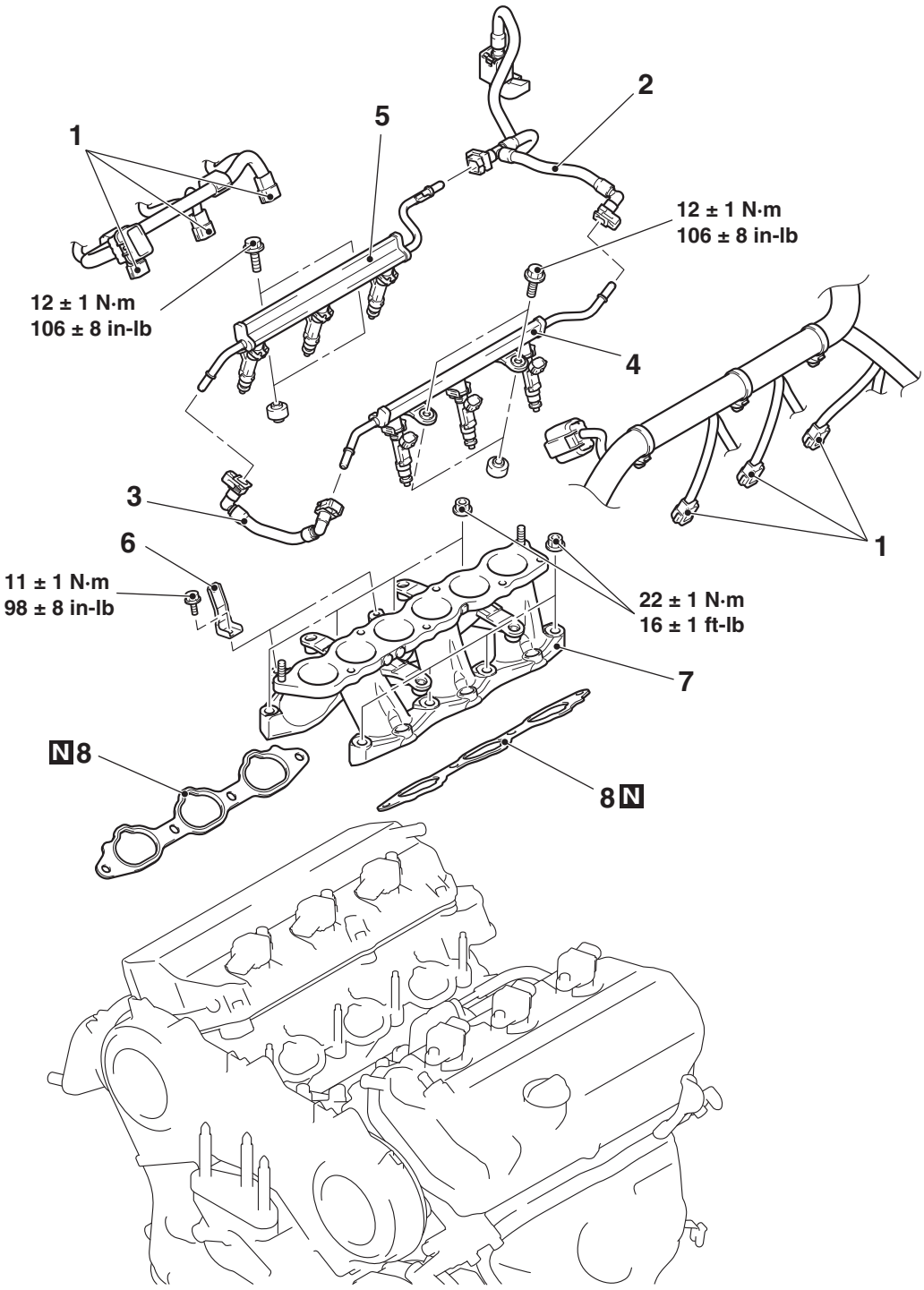
Install the intake manifold assembly and the injector protector front, and tighten mounting bolts and nuts temporarily.

NOTE: The tightening of the fuel rail, the intake manifold assembly and the injector protector front and rear has the specified order. Temporarily tighten the intake manifold assembly and injector protector front mounting bolts and nuts (Refer to GROUP 13A, Injector P.13A-975).

REMOVAL AND INSTALLATION <3.0L ENGINE>

M1151003003146

Pre-removal Operation	Post-installation Operation
• Fuel Discharge Prevention [Refer to GROUP 13B, On-vehicle Service –Fuel Pump Connector Disconnection (How to Reduce Pressurized Fuel Lines) P.13B-876]. • Intake Manifold Plenum Removal (Refer to P.15-6).	• Intake Manifold Plenum Installation (Refer to P.15-6). • Fuel Leakage Inspection



AC703710AC

Removal steps

1. Injector connector connection

<<A>> >>B<< 2. Fuel high-pressure hose connection

Removal steps (Continued)

<<A>> >>B<< 3. Fuel high-pressure hose connection

<<B>> 4. Left fuel rail and fuel injector assembly

TSB Revision

Removal steps (Continued)

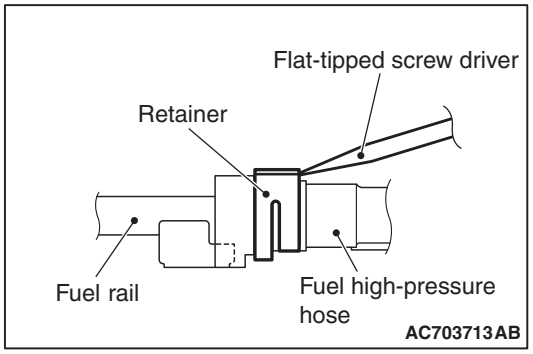
<<B>> 5. Right fuel rail and fuel injector assembly
6. Harness bracket
>>A<< 7. Intake manifold
8. Intake manifold gasket

REMOVAL SERVICE POINTS

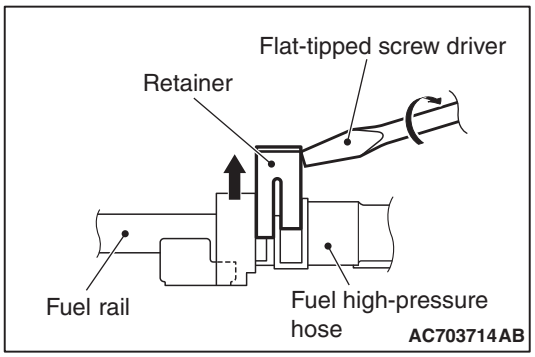
<<A>> FUEL HIGH-PRESSURE HOSE DISCONNECTION

⚠ CAUTION
Do not kink the fuel high-pressure hose as it is made of plastics.

1. Insert a flat-tipped screwdriver [width 6 mm (0.24 inch), thickness 1 mm (0.04 inch)] to the retainer.



2. Turn the flat-tipped screwdriver approximately 90° to the arrowed direction, and lift the retainer to unlock and disconnect the fuel high-pressure hose.



<<B>> FUEL RAIL AND INJECTOR ASSEMBLY REMOVAL

⚠ CAUTION
Do not drop the fuel injector.
Remove the fuel rail with the fuel injectors attached to it.

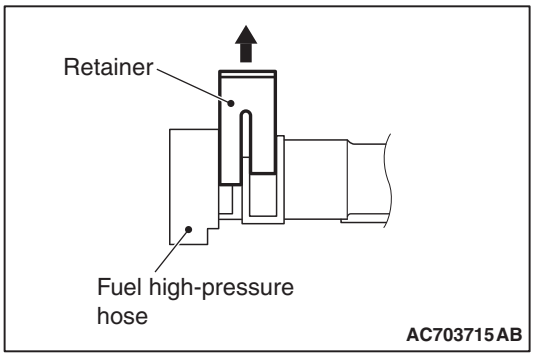
INSTALLATION SERVICE POINTS

>>A<< INTAKE MANIFOLD INSTALLATION

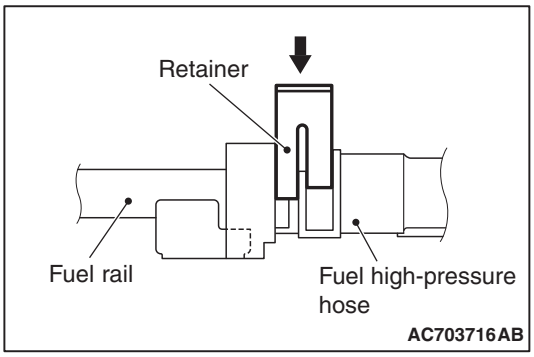
1. Coat the intake manifold mounting studs with engine oil.
2. Tighten the intake manifold mounting nuts by the following procedure.

Order	Mounting nuts	Tightening torque
1st	Left bank nuts	6.5 ± 1.5 N· m (58 ± 13 in-lb)
2nd	Right bank nuts	22 ± 1 N· m (16 ± 1 ft-lb)
3rd	Left bank nuts	22 ± 1 N· m (16 ± 1 ft-lb)
4th	Right bank nuts	22 ± 1 N· m (16 ± 1 ft-lb)
5th	Left bank nuts	22 ± 1 N· m (16 ± 1 ft-lb)

>>B<< FUEL HIGH-PRESURE HOSE CONNECTION



1. Pull up the lock of fuel high-pressure hose to unlock before installing.



2. Install the fuel high-pressure hose to the fuel rail securely and push the lock of fuel high-pressure hose downward and lock thoroughly.
3. After installing, slightly pull the fuel high-pressure hose and ensure that there is no disengaged fuel high-pressure hose. Also confirm that there is approximately 1 mm (0.04 inch) play at this time.

INSPECTION

M1151003101114

Check the following points; replace the part if a problem is found.

Intake Manifold Check

1. Check for damage or cracking of any part.
2. Clogging of the negative pressure (vacuum) outlet port, or clogging of the exhaust gas recirculation passages.
3. Using a straight edge and feeler gauge, check for distortion of the cylinder head installation surface.

   Standard value: 0.15 mm (0.006 inch) or less
   Limit: 0.20 mm (0.008 inch)

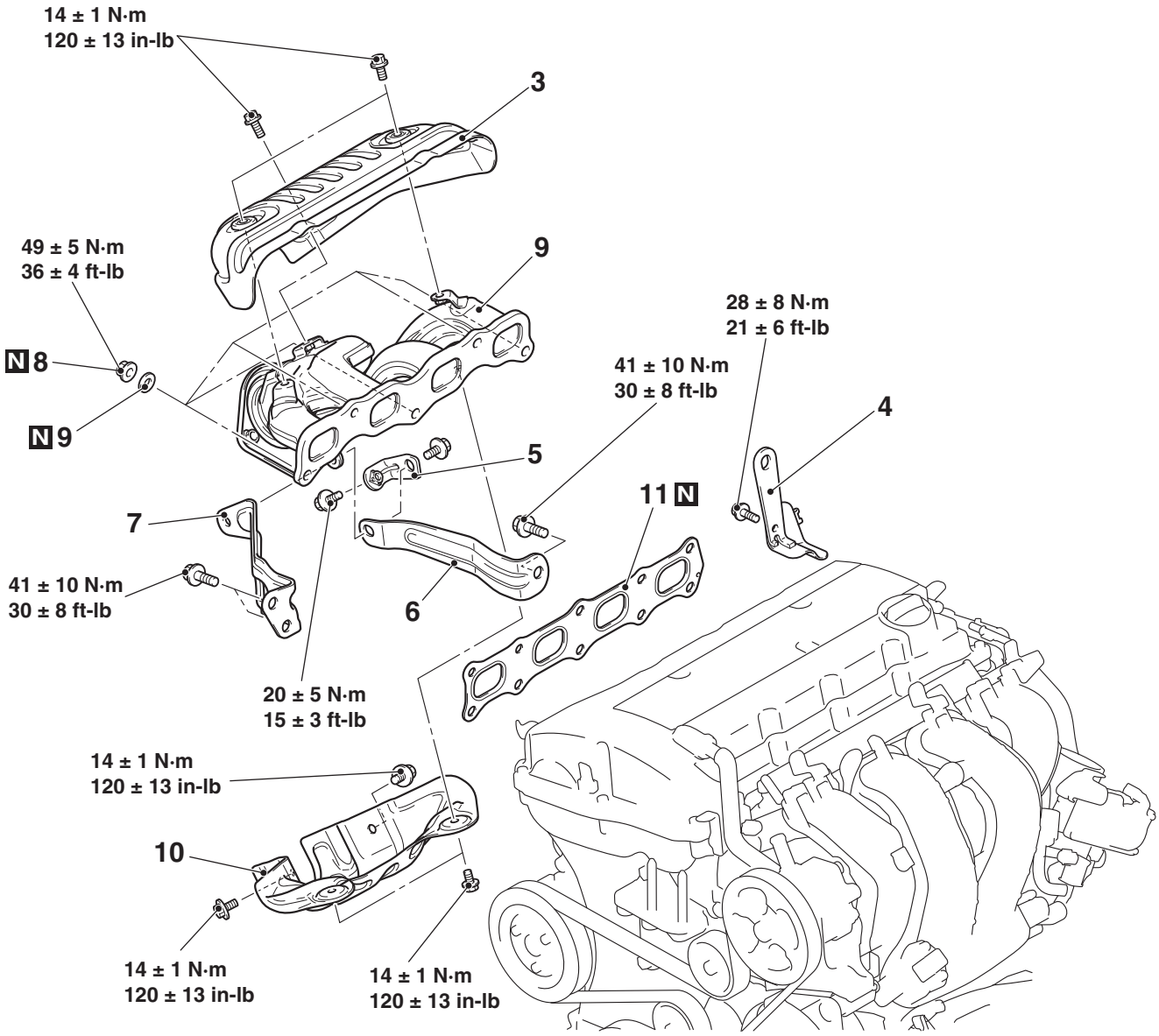
EXHAUST MANIFOLD

REMOVAL AND INSTALLATION <2.4L ENGINE>

M1151003302605

Pre-removal operation	Post-installation operation
• Front Exhaust Pipe Removal (Refer to P.15-22). • Strut Tower Bar Removal (Refer to GROUP 42A, Strut Tower Bar P.42A-11).	• Strut Tower Bar Installation (Refer to GROUP 42A, Strut Tower Bar P.42A-11). • Front Exhaust Pipe Installation (Refer to P.15-22).

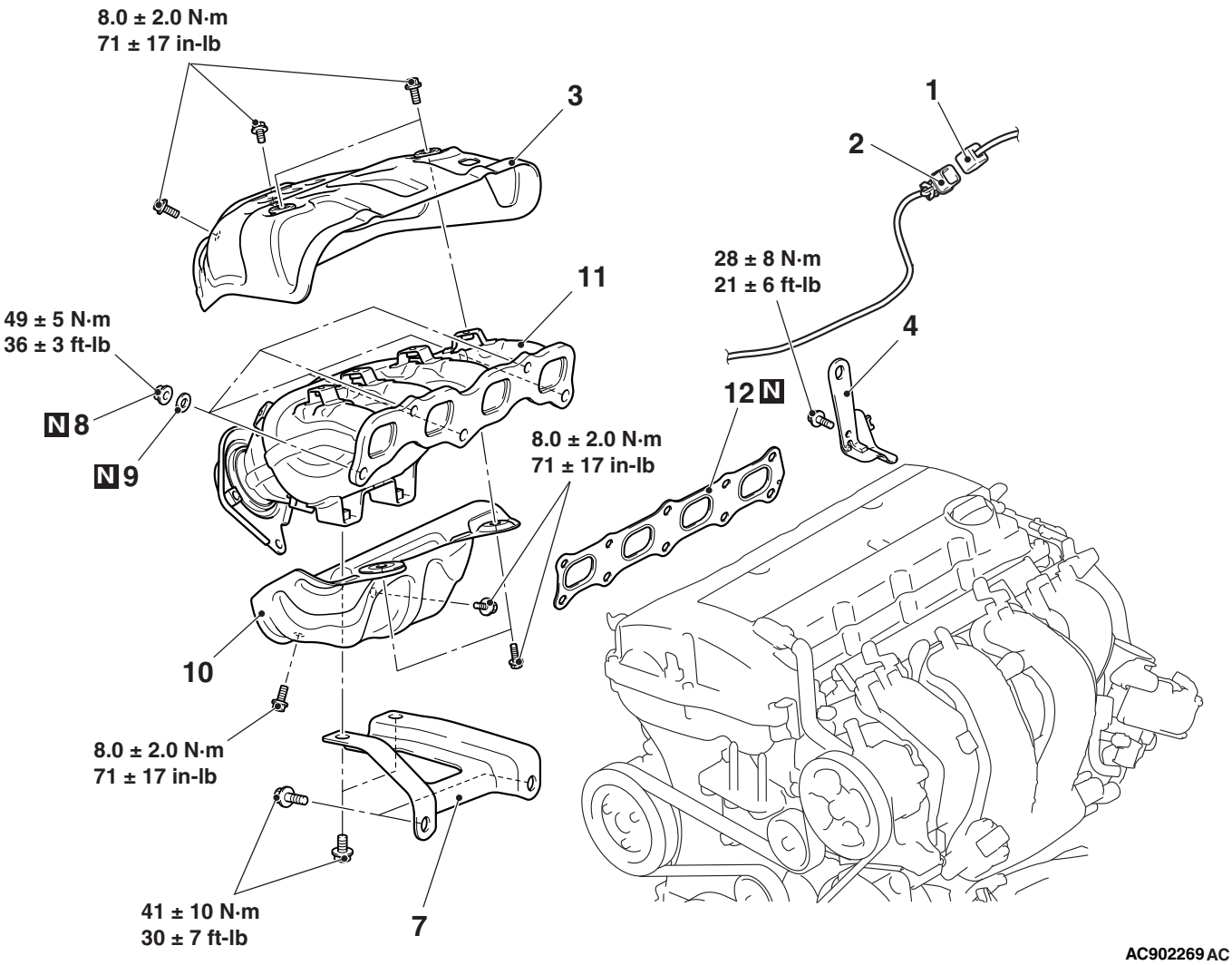
<FWD - FEDERAL EMISSION REGULATION>



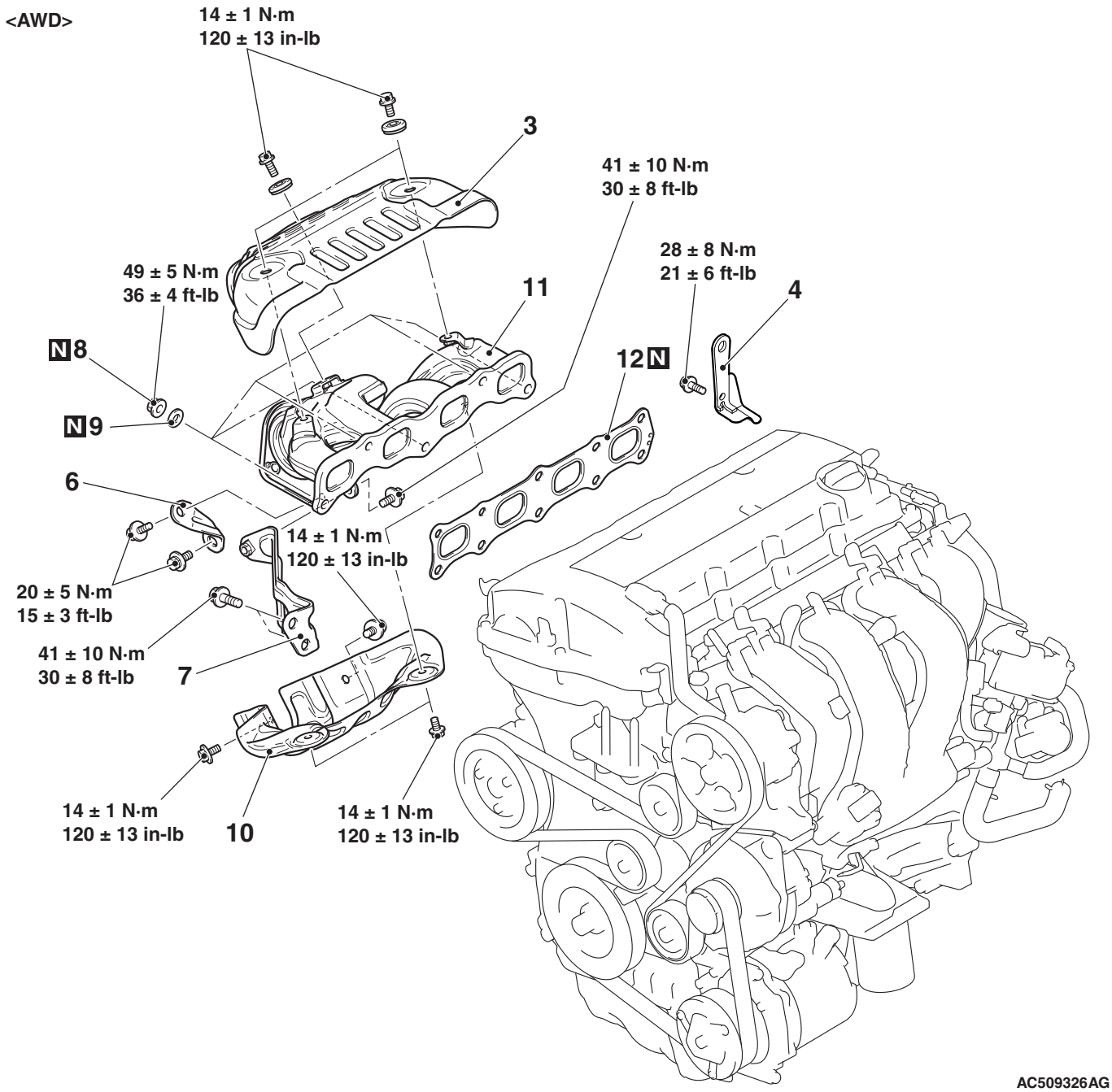
AC608496AE

TSB Revision

<FWD - CALIFORNIA EMISSION REGULATION>



TSB Revision



Removal steps

1. Linear A/F sensor connector connection <vehicles for California>
2. Linear A/F sensor harness clamp connection <vehicles for California>
1. Exhaust manifold cover (upper)
2. Engine hanger

Removal steps (Continued)

3. Exhaust manifold bracket D
>>B<< 4. Exhaust manifold bracket B
5. Exhaust manifold bracket A
<<A>> >>A<< 6. Exhaust manifold nut
<<A>> >>A<< 7. Exhaust manifold washer
<<A>> >>A<< 8. Exhaust manifold cover (lower)
<<A>> >>A<< 9. Exhaust manifold
10. Exhaust manifold gasket

TSB Revision

REMOVAL SERVICE POINT

<<A>> EXHAUST MANIFOLD NUT/EXHAUST MANIFOLD WASHER/EXHAUST MANIFOLD/EXHAUST MANIFOLD COVER (LOWER) REMOVAL <AWD>

1. Remove the mounting bolts of the exhaust manifold cover (lower) and move them to the position where they will not interfere with the loosening of the exhaust manifold nuts.
2. Loosen the exhaust manifold nuts, and remove the exhaust manifold nuts and the exhaust manifold washers.
3. Remove the exhaust manifold and the exhaust manifold cover (lower) as a set.

INSTALLATION SERVICE POINTS

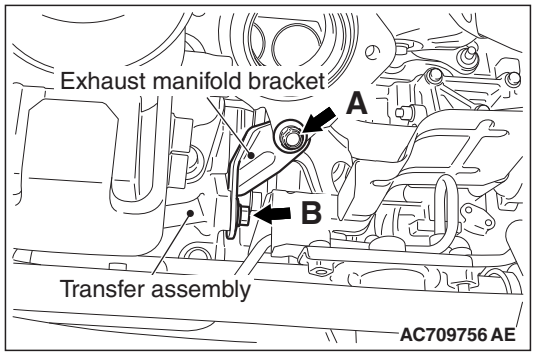
>>A<< EXHAUST MANIFOLD COVER (LOWER)/EXHAUST MANIFOLD/EXHAUST MANIFOLD WASHER/EXHAUST MANIFOLD NUT INSTALLATION

1. Install the exhaust manifold cover (lower) to the exhaust manifold (with mounting bolts removed), install the exhaust manifold and the exhaust manifold cover (lower) to the engine as a set.
2. Move the exhaust manifold cover (lower) to the position where it will not interfere with the installation of the exhaust manifold nuts.
3. Install the new exhaust manifold nuts and exhaust manifold washers, and tighten the exhaust manifold nuts to the specified torque.

   Tightening torque: 49 ± 5 N· m (36 ± 4 ft-lb)
4. Install the exhaust manifold cover (lower) to the exhaust manifold, and tighten the exhaust manifold cover (lower) mounting bolts to the specified torque.

   Tightening torque: 14 ± 1 N· m (120 ± 13 in-lb)

>>B<< EXHAUST MANIFOLD BRACKET INSTALLATION <AWD>



1. Make sure that the exhaust manifold bracket is closely contacted with the exhaust manifold and transfer assembly, and then temporarily tighten the bolts.
2. Tighten bolt A on the exhaust manifold side in the figure to the specified torque.

   Tightening torque: 20 ± 5 N· m (15 ± 3 ft-lb)
3. Tighten bolt B on the transfer assembly side in the figure to the specified torque.

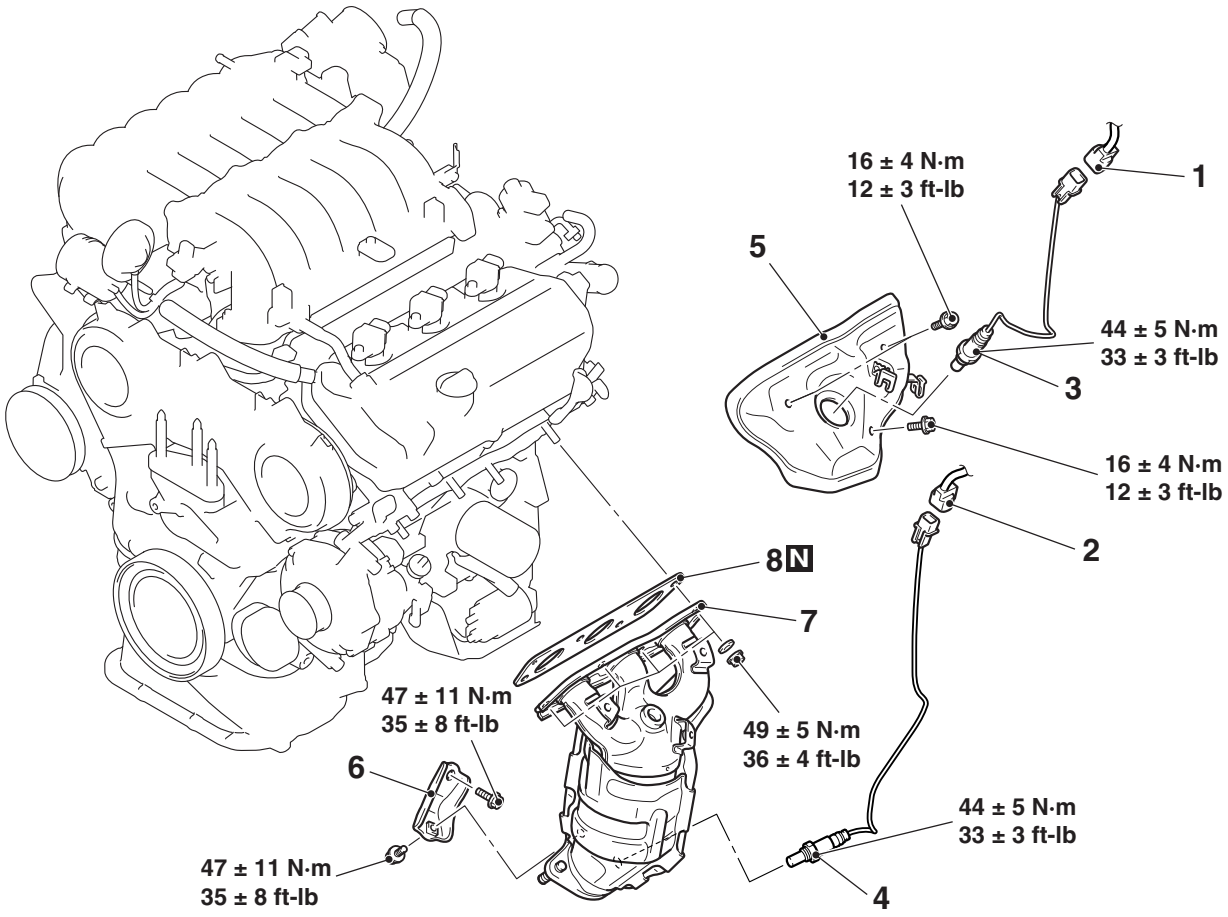
   Tightening torque: 20 ± 5 N· m (15 ± 3 ft-lb)

REMOVAL AND INSTALLATION <3.0L ENGINE>

M1151003302597

<LEFT BANK>

Pre-removal and Post-installation Operation
- Under Cover Removal and Installation (Refer to GROUP 51, Under Cover P.51-22).
- Air Duct Removal and Installation (Refer to P.15-5).
- Front Exhaust Pipe Removal and Installation (Refer to P.15-26).



AC703711AB

Removal steps

1. Left bank heated oxygen sensor (Front) connector connection
2. Left bank heated oxygen sensor (Rear) connector connection

<<A>> >>B<< 3. Left bank heated oxygen sensor (Front)

Removal steps (Continued)

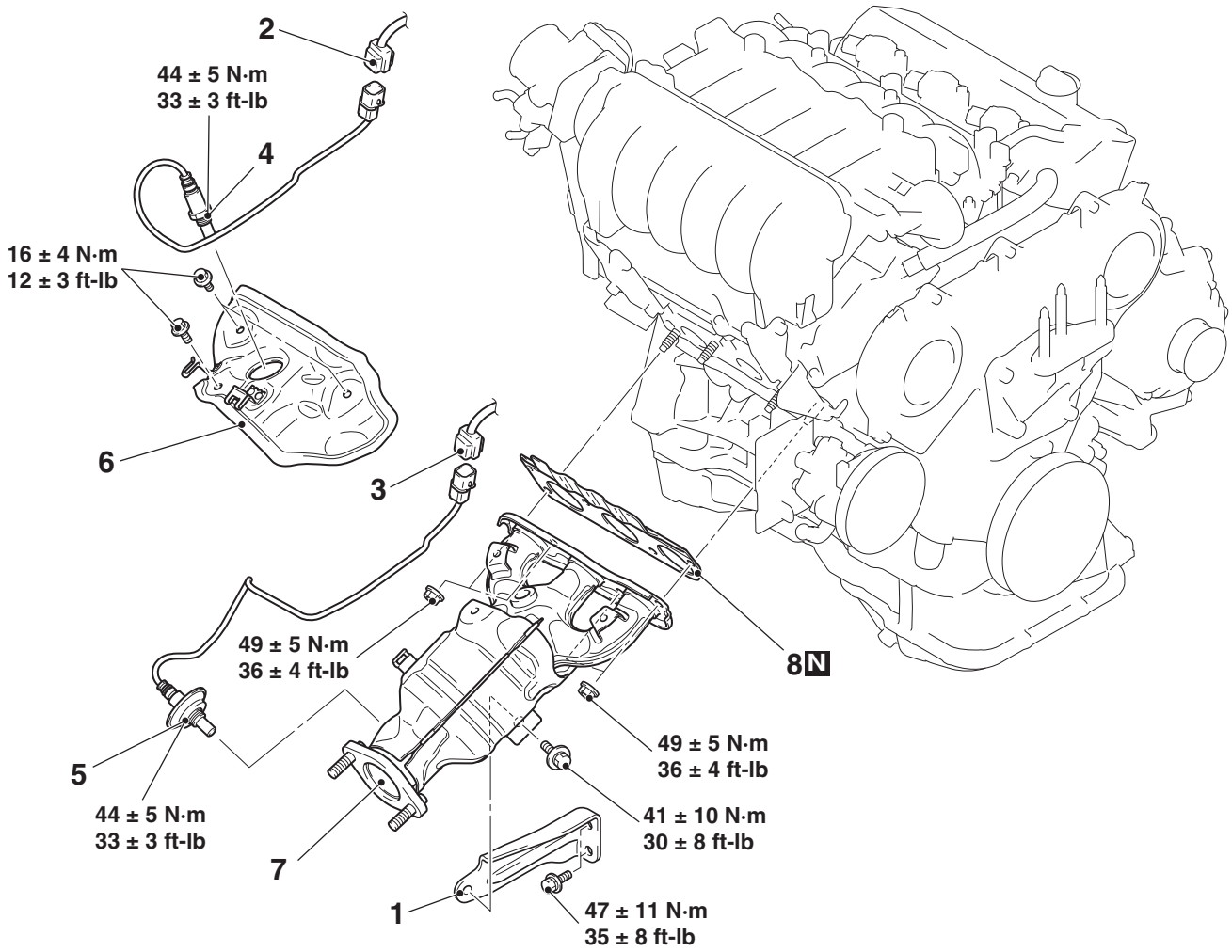
<<B>> >>A<< 4. Left bank heated oxygen sensor (Rear)

5. Heat protector
6. Left exhaust manifold bracket
7. Exhaust manifold
8. Exhaust manifold gasket

TSB Revision

<RIGHT BANK>

Pre-removal and Post-installation Operation
- Air Cleaner Cover and Air Intake Duct Removal and Installation (Refer to P.15-5).
- Battery Removal and Installation
- Under Cover Removal and Installation (Refer to GROUP 51, Under Cover P.51-22).
- Front Exhaust Pipe, Center Exhaust Pipe and Front Floor Front Panel Heat Protector Removal and Installation (Refer to P.15-26).
- Strut Tower Bar Removal and Installation (Refer to GROUP 42A, Strut Tower Bar P.42A-11).



AC901525 AB

Removal steps
1. Right exhaust manifold bracket <Vehicles without S-AWC>
2. Right bank heated oxygen sensor (Front) connector connection
3. Right bank heated oxygen sensor (Rear) connector connection

<<A>> >>B<<

<<B>> >>A<<

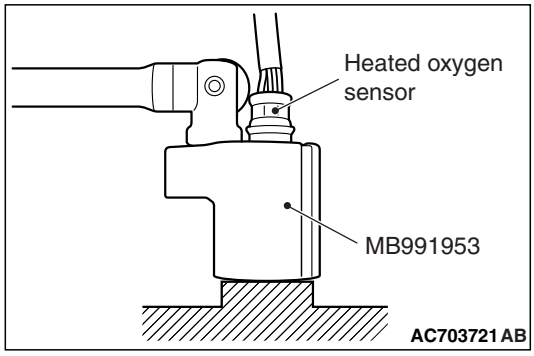
Removal steps (Continued)
4. Right bank heated oxygen sensor (Front)
5. Right bank heated oxygen sensor (Rear)
6. Heat protector
7. Exhaust manifold
8. Exhaust manifold gasket

Required Special Tools:
- MB991953: Oxygen Sensor Wrench
- MD998770: Oxygen Sensor Wrench

TSB Revision

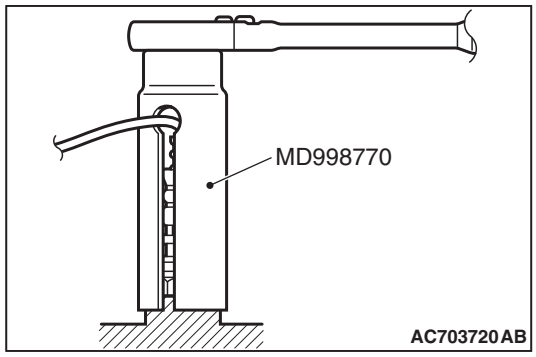
REMOVAL SERVICE POINTS

<<A>> LEFT BANK HEATED OXYGEN SENSOR (FRONT)/RIGHT BANK HEATED OXYGEN SENSOR (FRONT) REMOVAL



Use special tool MB991953 to remove the heated oxygen sensor.

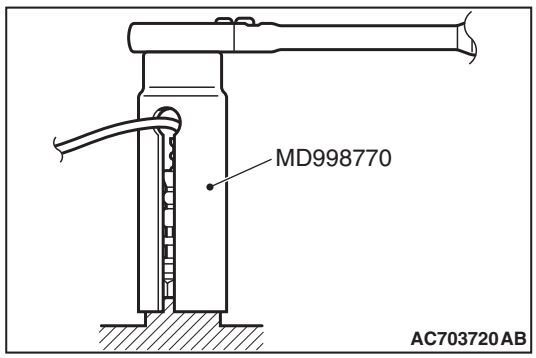
<<B>> LEFT BANK HEATED OXYGEN SENSOR (REAR)/RIGHT BANK HEATED OXYGEN SENSOR (REAR) REMOVAL



Use special tool MD998770 to remove the heated oxygen sensor.

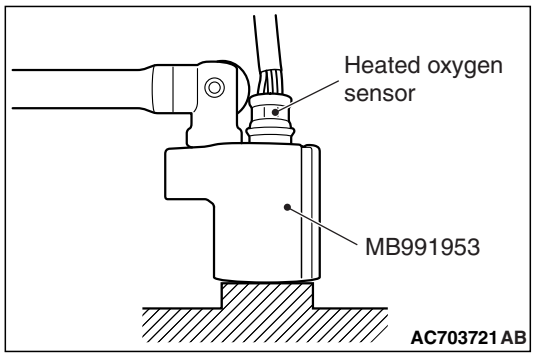
INSTALLATION SERVICE POINTS

>>A<< RIGHT BANK HEATED OXYGEN SENSOR (REAR)/LEFT BANK HEATED OXYGEN SENSOR (REAR) INSTALLATION



Use special tool MD998770 to install the heated oxygen sensor.

>>B<< RIGHT BANK HEATED OXYGEN SENSOR (FRONT)/LEFT BANK HEATED OXYGEN SENSOR (FRONT) INSTALLATION



Use special tool MB991953 to install the heated oxygen sensor.

INSPECTION

M1151003401041

Check the following points; replace the part if a problem is found.

Exhaust Manifold Check

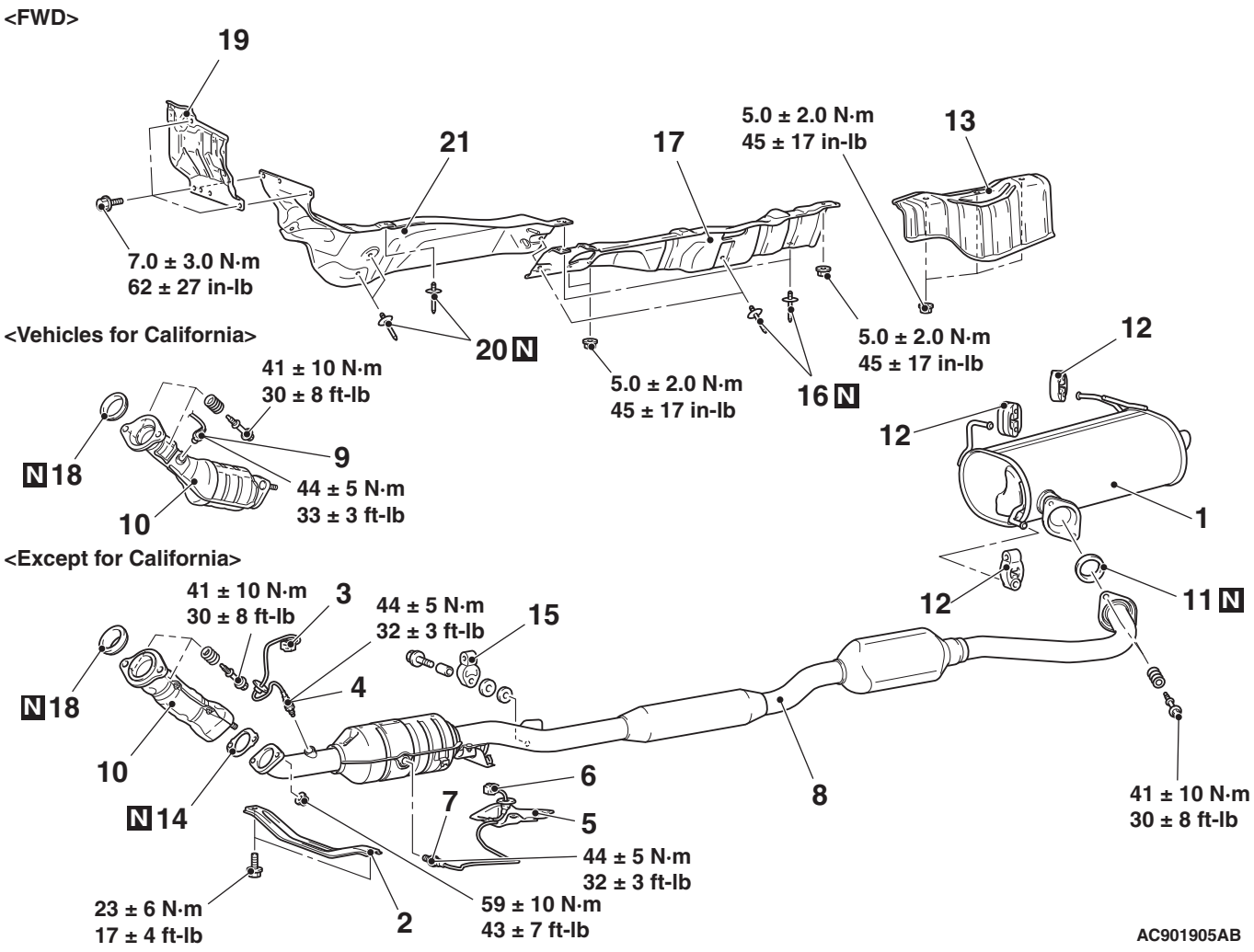
1. Check for damage or cracking of any part.
2. Using a straight edge and a feeler gauge, check for distortion of the cylinder head installation surface.

   Standard value: 0.7 mm (0.028 inch) or less
   Limit: 0.5 mm (0.020 inch)

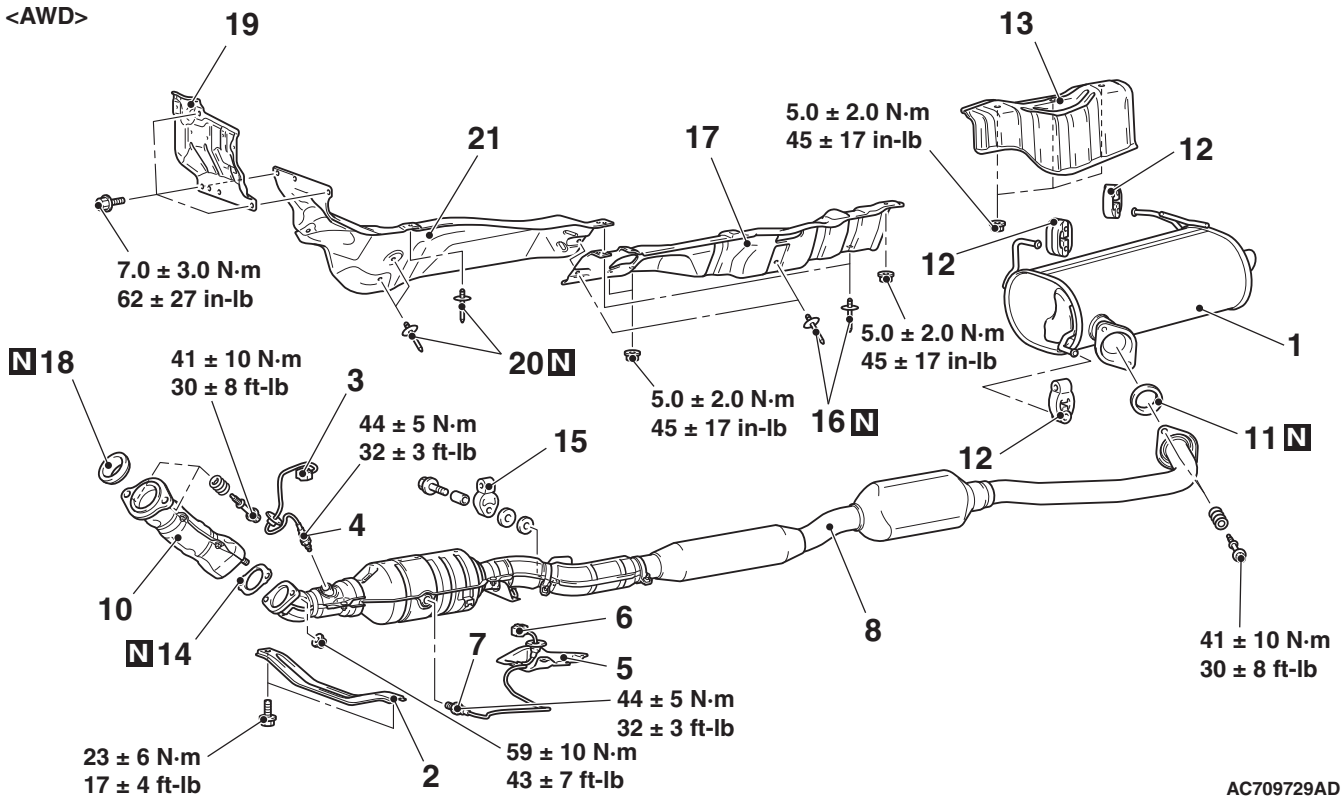
EXHAUST PIPE AND MAIN MUFFLER

REMOVAL AND INSTALLATION <2.4L ENGINE>

M1151008702631



TSB Revision



Exhaust main muffler and rear floor panel heat protector removal steps

1. Exhaust main muffler
11. Seal ring
12. Exhaust muffler hanger
13. Rear floor panel heat protector

Center exhaust pipe and front floor panel rear heat protector removal steps

2. Backbone brace
- Front seat assembly (RH) (Refer to GROUP 52A, Front Seat Assembly P.52A-17).
- Turn up the passenger's side floor carpet.

3. Heated oxygen sensor connector connection

<<A>> >>B<<

4. Heated oxygen sensor (rear) <Vehicles for California> or Heated oxygen sensor (front) <Except for California>
5. Harness cover

<<B>> >>A<<

6. Heated oxygen sensor connector connection

Center exhaust pipe and front floor panel rear heat protector removal steps (Continued)

7. Heated oxygen sensor (3rd) <Vehicles for California> or Heated oxygen sensor (rear) <Except for California>
8. Center exhaust pipe
11. Seal ring
14. Exhaust pipe gasket
15. Exhaust muffler hanger
16. Rivet
17. Front floor rear panel heat protector

Front exhaust pipe and front floor panel front heat protector removal steps

<<A>> >>B<<

9. Linear air-fuel ratio sensor <Vehicles for California>
10. Front exhaust pipe
14. Exhaust pipe gasket
18. Seal ring
19. Dash panel heat protector
20. Rivet
21. Front floor front panel heat protector

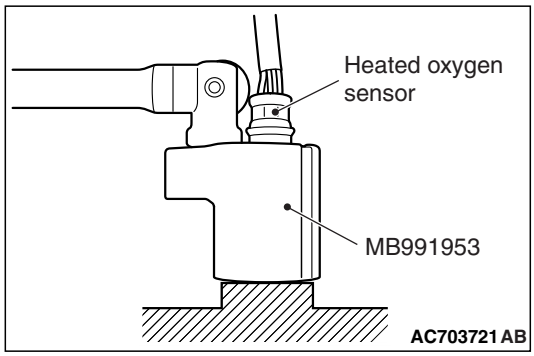
<<B>> >>A<<

Required Special Tool:
- MB991953: Oxygen Sensor Wrench

TSB Revision

REMOVAL SERVICE POINTS

<<A>> LINER AIR-FUEL RATIO SENSOR/HEATED OXYGEN SENSOR REMOVAL

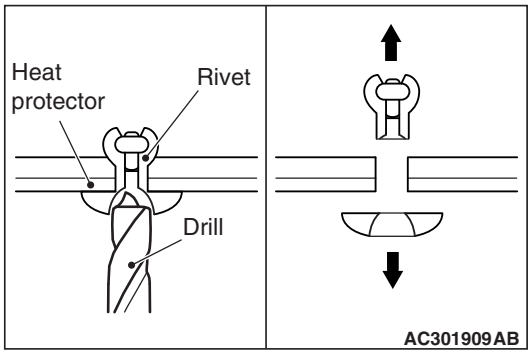


Remove the connection and clamp of heated oxygen sensor connector, and then use special tool MB991953 to remove the heated oxygen sensor.

<<B>> RIVET REMOVAL

⚠ CAUTION

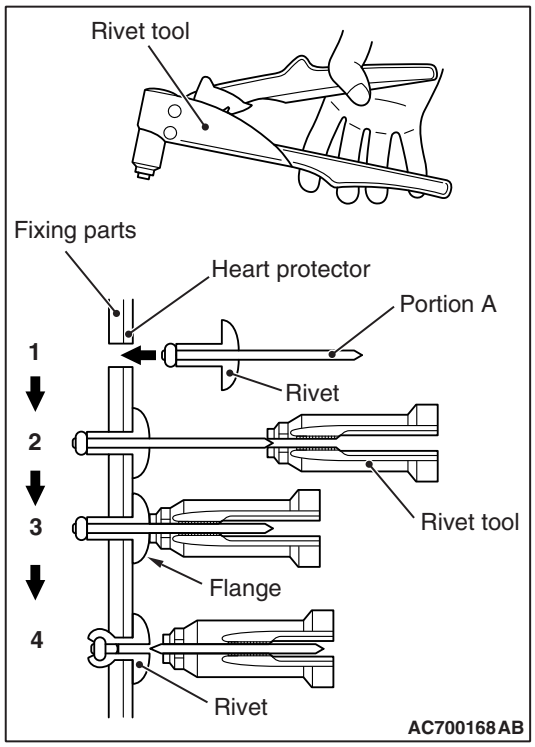
Be careful not to damage the heat protector with the drill.



Use a drill [6.0 mm (0.24 inch)] to make a hole in the rivet to break it, and then remove the rivet.

INSTALLATION SERVICE POINTS

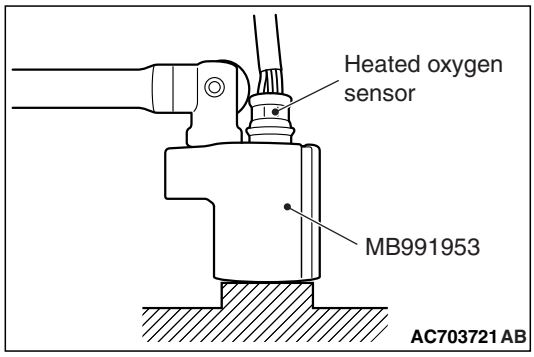
>>A<< RIVET INSTALLATION



Use a rivet tool shown in the illustration to connect the parts with rivets by the following procedures.

1. Insert the rivet into a corresponding location.
2. Set the rivet tool at a portion A of rivet.
3. While pushing the flange surface of the rivet onto parts to be fixed with the rivet tool, press the handle of the tool.
4. Thin part of portion A of the rivet will be cut off and the part is fixed in position.

>>B<< LINER AIR-FUEL RATIO SENSOR/HEATED OXYGEN SENSOR INSTALLATION



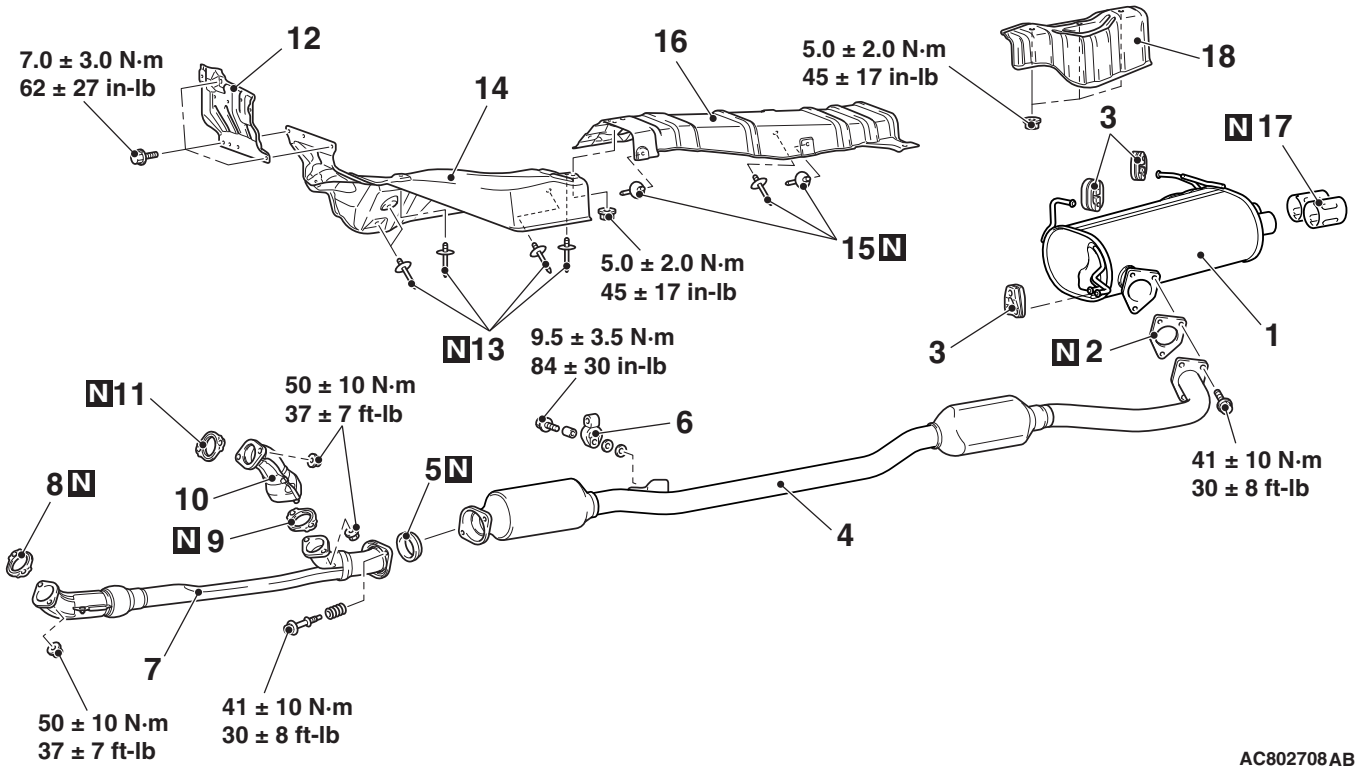
Tighten the heated oxygen sensor to the specified torque by using special tool MB991953.

Tightening torque: 44 ± 5 N· m (32 ± 3 ft-lb)

REMOVAL AND INSTALLATION <3.0L ENGINE>

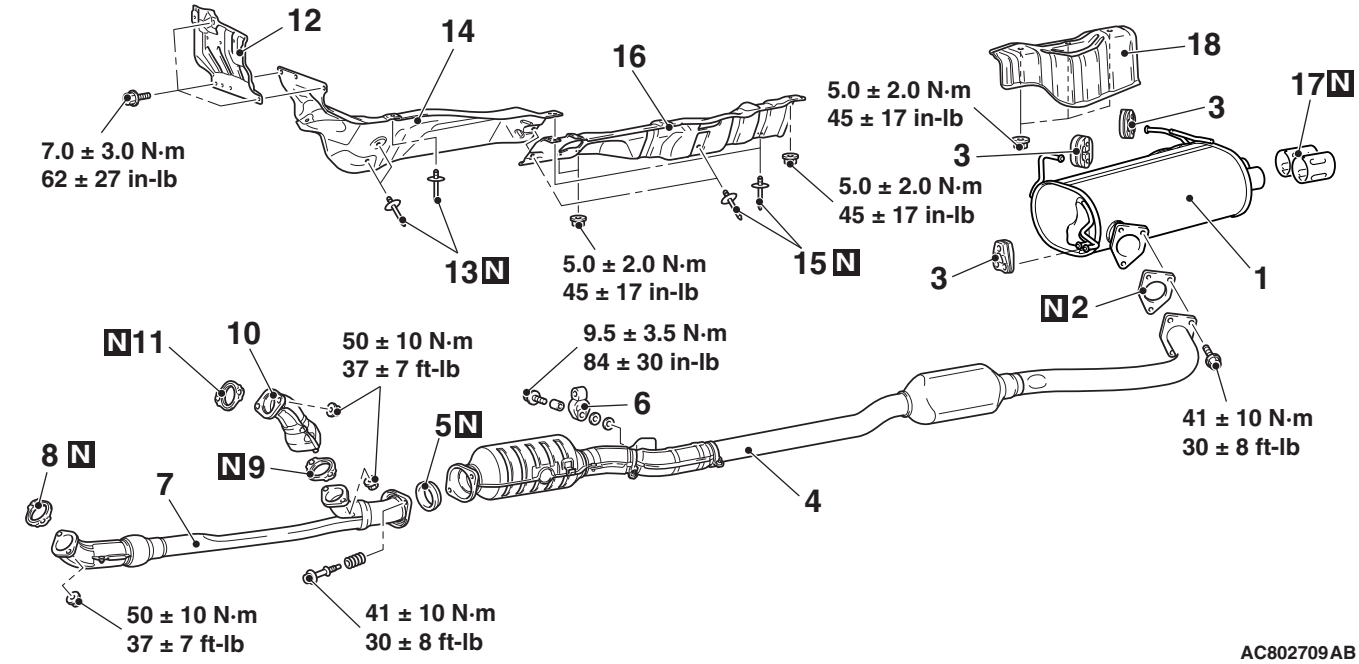
M1151008702697

<FWD>



AC802708AB

<AWD>



AC802709AB

Exhaust main muffler and rear floor panel heat protector removal steps

1. Exhaust main muffler
2. Gasket
3. Hanger

<<A>>

17. Exhaust tail pipe diffuser
18. Rear floor panel heat protector

Center exhaust pipe removal steps

4. Center exhaust pipe
5. Seal ring
2. Gasket
6. Hanger

TSB Revision

Front exhaust pipe and front floor rear panel heat protector removal steps

7. Front exhaust pipe
8. Gasket
9. Gasket
5. Seal ring
10. Front exhaust pipe RH
11. Gasket
12. Dash panel heat protector

<<B>> >>A<< 13. Rivet

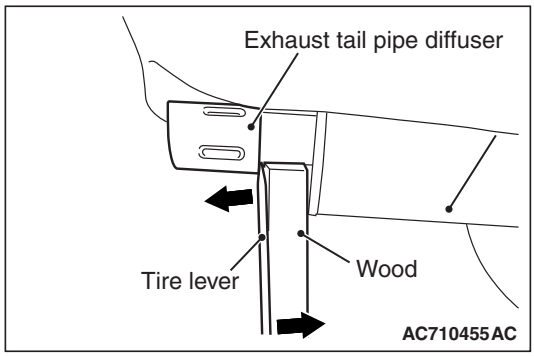
14. Front floor front panel heat protector

<<B>> >>A<< 15. Rivet

16. Front floor rear panel heat protector

REMOVAL SERVICE POINTS

<<A>> EXHAUST TAIL PIPE DIFFUSER REMOVAL

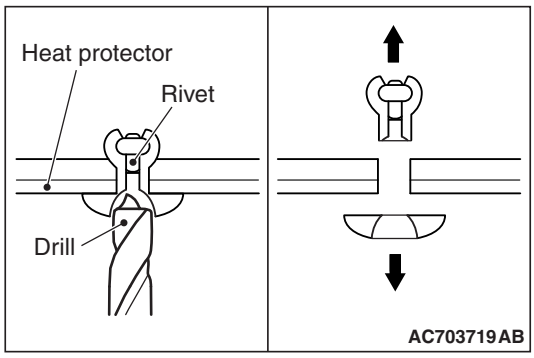


Insert the wood and tire lever between exhaust tail pipe diffuser and exhaust main muffler.
And then turn the tire lever and remove exhaust tail pipe diffuser.

<<B>> RIVET REMOVAL

⚠ CAUTION

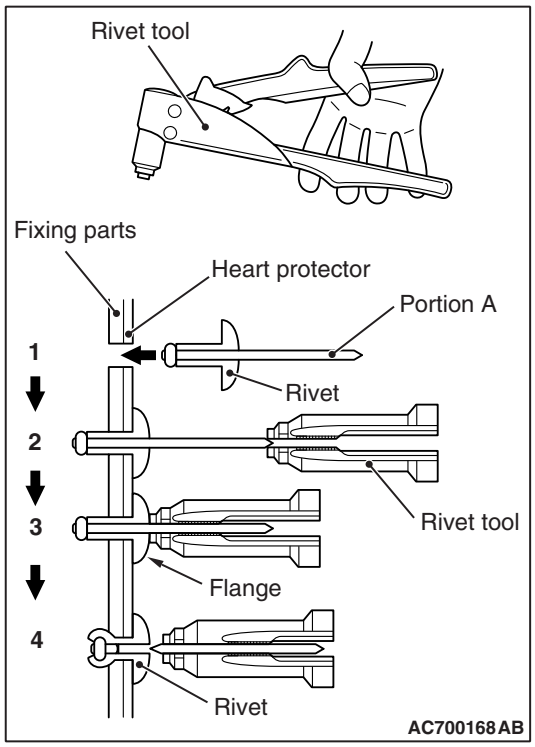
Be careful not to damage the heat protector with the drill.



Use a drill [6.0 mm (0.24 inch)] to make a hole in the rivet to break it, and then remove the rivet.

INSTALLATION SERVICE POINT

>>A<< RIVET INSTALLATION



Use a rivet tool shown in the illustration to connect the parts with rivets by the following procedures.

1. Insert the rivet into a corresponding location.
2. Set the rivet tool at a portion A of rivet.
3. While pushing the flange surface of the rivet onto parts to be fixed with the rivet tool, press the handle of the tool.
4. Thin part of portion A of the rivet will be cut off and the part is fixed in position.